NATIONAL DEFENSE UNIVERSITY

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WHY THE US MUST PURSUE A COOPERATIVE JAPANESE - US THEATER MISSILE DEFENSE PROGRAM

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"Although diplomacy has a role to play, the building of a global ballistic defense system should be a top priority--and America's allies should help to foot the bill It is not the terrible consequences of these weapons' actual use, but also the implication of their **threatened** use, that are so serious For that threat also casts significant doubt on our ability to protect Western interests around the world "[1]

Margaret Thatcher, Foreword, *The Next War*

Introduction

Despite eight years of study on a proposed Japanese - United States multi-billion dollar theater missile defense (TMD) development program, recent reports indicate Japan may be reluctant to continue to participate in this effort "for fear of offending China and overspending scarce military resources "[2] Clearly, to preserve United States and Japanese enduring interests in the highly volatile, dynamic Asian security environment, the United States must continue to aggressively pursue Japanese cooperative support for this essential defense program Integrated TMD systems support our regional interests by maintaining a strong defensive posture to deter aggressors, protect our forces and freedom of navigation, and defeat or negate ballistic missile delivered weapons of mass destruction should diplomatic or deterrence efforts fail [3] Additionally, the program would further strengthen our bilateral security arrangement in major areas, such as enhanced technology transfer and improved interoperability

This essay explores the current and future ballistic missile threats to vital national interests in the region, describes the proposed TMD cooperative program, analyzes the major advantages and opposing views of this program, and outlines policy recommendations to ensure its success

Background

From 1989 - 1993, the United States studied the issue of missile threats in the Western Pacific under the then Strategic Defense Initiative Organization's, now the Ballistic Missile Defense Organization's (BMDO) charter to provide global missile defense The $9 million research, funded by the United States but done by two United States - Japanese industry teams, concluded, " the threat to US forces and Japan is real and there is a need to establish an effective TAD [Theater Air Defense, now TMD] architecture "[4] In 1995, the Japanese government funded a two year, $3 million follow-on study to the initial research to examine the efficacy of TMD and define the technical feasibility, range, and costs of integrated theater defensive architecture options against current and future regional ballistic missile threats The study results, to be released by the Japanese government this summer, will determine the future for bilateral United States - Japan TMD systems [5]

Interests and Threats

As long as we are activists in world affairs, theater ballistic missiles are a direct threat to our forces and allies, and may cause small regional conflicts to widen, in turn impacting our, or our allies, vital interests [6] Today, China and North Korea have demonstrated the capability, but not the intent or will, to threaten vital United States and Japanese interests with either conventional munitions or weapons of mass destruction delivered by theater ballistic missiles If in the future their intent changes, as their missile and weapons of mass destruction arsenals grow, these potential regional competitors will pose an increasing threat to our strategic interests in Japan, defended by only a minimal TMD system [7]

From the United States perspective, our interests in Japan and the Northeast Asia region are clear Consistent with the central goals of our national security strategy, we "enhance our security" through forces stationed there, "promote prosperity at home" through access to the region's burgeoning markets, and "promote democracy abroad" by protecting those free markets [8] Our strong presence and engagement in the region ensures regional stability by providing a secure environment that allows economic growth rather than regional arms races and prevents the rise of any hostile hegemon With 100,000 CINCPAC forward deployed troops, forty-five percent (45%) of the world's foreign currency reserves and forty percent (40%) of all new purchasing power, no region of the world beyond North America is more vital to our future [9]

Japanese interests fall in similar categories but different priorities Since World War II, Japanese foreign policy has been primarily based on trade expansionism, with security interests fully entrusted to the United States [10] Japan's number one priority is to protect its economic engine requiring the import of large volumes of oil, natural gas, and raw manufacturing materials, along with access to world markets Since regional instability would severely hamper Japan's economic prosperity, maintaining regional peace and preventing the rise of a regional superpower are also in Japan's national interest

The weapons of mass destruction and ballistic missile threats from China and North Korea that challenge our interests in Northeast Asia are equally unambiguous By using ballistic missiles to threaten Taiwan on the eve of presidential elections in March 1996, China demonstrated the capability and willingness to use weapons of terror to intimidate regional actors to achieve political objectives Fueled by rapid economic growth, China is swiftly developing a new class of ballistic missile submarines and new indigenous ballistic missiles and buying power projection

forces such as Russian Kilo class attack submarines, Sovermenny class destroyers and SU-27 fighters, along with a French aircraft carrier [11] The intermediate range ballistic missiles, possibly using both GPS and digital scene maps for terminal guidance, would provide China with highly lethal and accurate, conventional payloads or weapons of mass destruction, thus further increasing the already formidable ballistic missile threat to deployed United States forces and the Japanese homeland [12] Similarly, North Korea has demonstrated the capability to launch advanced ballistic missiles by test firing NoDong-1 missiles into the Sea of Japan in May 1993, sending an ominous message to the Japanese people regarding their national security [13] Along with advanced ballistic missile systems with sufficient range and accuracy, both countries are postulated to have nuclear, biological, and chemical capability which poses a tremendous threat to Japanese population centers and our deployed forces [14]

Looking to the future, we can only speculate on China's intent to use its impressive, offensive military capability According to a 1997 Pentagon report on Chinese modernization, China continues to restructure its military to dominate any regional force and deter any global strategic threat, thus ensuring its rightful place as "the premier power in the Western Pacific "[15] For example, a "reinvented" hard-line Communist regime could use its new military might to forcibly settle ancient territorial disputes or to challenge United States' role in the region In North Korea, their desperate economic situation could rapidly deteriorate, threatening the survival of the dictatorial government, and thus result in the use of force to attempt to reunify the peninsula before the government fails In this nightmare scenario, North Korea would most likely use its ballistic missiles with weapons of mass destruction to overwhelm our conventional forces prevent resupply, and discourage any regional coalition effort [16] An effective missile defense

shield, to protect the Japanese people and our forces, must be the cornerstone of our Japanese - United States alliance to safeguard against the uncertainties of the highly capable actors in this region In an eloquent editorial, Stephen Rosenfeld said, "China is neither a sure threat or a certain partner We must guard against the one possibility and cultivate the other "[17]

Cooperative TMD Program Scope

The missile defense system to guard against these threats is actually a family of existing or proposed air, land, sea or space based systems, linked together by a complex battle management system to provide a layered defensive umbrella over desired locations BMDO is incrementally developing, producing, and deploying a family of TMD systems to ensure improved capabilities in the field quickly to match the steadily increasing threat

Today, "lower tier" systems, such as the Patriot and Aegis, can defend very limited "point" or "small area" targets by intercepting missiles in their terminal phase of flight near the target area These defensive systems, also owned by the Japanese, only provide the most minimal capability today against the current ballistic missile threat To expand the coverage area of these systems, the United States has firm acquisition programs to improve the engagement capability of Patriot and Aegis through major radar, system software, and missile upgrades "Upper tier" systems intercept missiles early in their flight profile, during the ascent or "boost" phase, thus protecting wider-areas and reducing the number of missiles "lower tier" systems must intercept In addition to ongoing "upper tier" development programs, such as Theater High Altitude Area Defense and Lightweight Exoatmospheric Projectile, BMDO is researching advanced "boost" phase concepts, using air or space based lasers [18]

With these United States programs as a basis, the current study will outline the range of options for Japanese participation The cooperative program options span from limited or complete "lower tier" system upgrades to development and co-production of advanced "upper tier concepts " Japanese Defense Agency initial cost estimates of these options over the next 10 years range from approximately $3 billion to $16 billion [19]

Cooperative TMD Program Advantages

A Japanese - United States cooperative TMD program helps guarantee our collective security by supporting an integrated "diplomacy, deterrence, and defense" strategy that reduces arms build-ups, removes the incentive for war, reduces the vulnerability of our forces, and ensures a credible response posture [20] In addition, such a program would help achieve economic prosperity by bolstering both countries' defense infrastructures, sharing program costs, leveraging technology, and protecting vital trade areas Lastly, the program would significantly improve our forces' interoperability

A strong cooperative defensive umbrella, as part of the Japan - United States security alliance, discourages arms build-ups by countries who would be uncomfortable with, or suspicious of, increased Japanese militarism Without the United States playing a leading role in protecting Japan, the Japanese would be faced with two untenable security options These options are adopting the "unarmed neutrality" approach or developing a "stand-alone" military capability The first option is highly impractical, given the threats in the aggressor nations that may target Japan's lucrative economic capabilities The second approach would certainly result in significant regional apprehensions and potential arms races, along with a lost economic opportunity for

United States industry [21] In the arms control arena, these missile defense systems can be viewed as "non-provocative defenses" that complement the United States' overwhelming conventional forces and Japan's self-defense forces As such, this "non-provocative defense" strategy "removes *all* incentive for an opponent to resort to preemptive or preventative war," by negating the effectiveness of his offensive weapons [22]

As a deterrent, to protect our ability to effectively retaliate against countries who use ballistic missile delivery systems for weapons of mass destruction, improved defensive systems will reduce the vulnerability of our forward based forces Without these defenses, an aggressor could strike a disarming blow to our limited power projection forces stationed in Japan and South Korea and therefore restrict our ability to respond in a crisis The effectiveness of this "deterrence by denial" is directly proportional to the United States' and Japan's ability to neutralize, or at least, minimize the damage from these weapons Lacking a credible defensive posture, we would be committed to respond immediately to punish the use of weapons of mass destruction against our forces or those of our allies A defensive system, protecting our assets, allows us the luxury of time to formulate and meter our response [23]

As the foundation of our defensive strategy, a cooperative TMD program provides many advantages On the densely packed Japanese islands, TMD systems would guard our forces and Japanese population centers Likewise, these systems also guarantee safe theater entry for follow-on forces, most critical to any major regional campaign Next, a cooperative defense system, able to be operated by either United States or Japanese forces, would assist in further reducing the "footprint" of our forces in Japan, an issue on which the Japanese are extremely sensitive

Along with ensuring stability and providing security in the region, a defensive umbrella helps ensure our economic prosperity in several ways First, a cooperative TMD program would help revitalize the Japanese and United States' defense infrastructures through increased jobs and improved technology transfers The Institute for National Strategic Studies recognizes the outstanding potential of Japanese armaments cooperation, estimating that major bilateral programs such as TMD will result in "billions of dollars in production and jobs "[24] Cost-sharing on TMD is also especially crucial as both Japan and the United States face severely declining resources to support national objectives In addition to the pure economic and cost sharing aspects of this partnership, the United States could also leverage critical missile defense technologies where the Japanese maintain an overwhelming comparative advantage For example, TMD relies on melding three key advanced technological systems (a precise detection system, a high-speed interceptor, and robust battle management, command and control links) into a single integrated architecture This combination requires high-quality, rugged, miniaturized electronic components and processors, areas where the Japanese have consistently excelled [25] Under a "Technology for Technology (TFT)" agreement, in exchange for their electronic capability, the Japanese government and industry would receive valuable anti-missile sensor and kill-weapon technology [26] Similar to the way Ballistic Missile Defense Organization funded technology investments have strategically benefited our commercial sector supporting advances in robotics, communications, information systems, sensors, materials and optics, transferred technology would also provide an extremely valuable base for dual-use applications [27] Lastly, since the system could protect the region's vast shipping lanes, China or North Korea would be unable to "bully" the

United States or Japan by placing us "under siege," and severely impacting two key components of our continued prosperity--global financial stability and Asian trade [28]

Cooperative TMD systems also benefit both parties by achieving interoperable, combined and joint use systems Since the advanced, "upper tier" systems are still concepts, there is a unique opportunity for international cooperation with countries such as Japan trying to solve the same TMD problem [29] Early collaboration allows both parties to fully exploit technological development to suit their particular needs In the past, Japan modified American systems to meet unique requirements and as a result, ended up with systems operationally and logistically non-interoperable with ours Lastly, because missile defense engagements require inter-service coordination, introducing TMD systems to the Japanese Self Defense Forces would cut down current service "stove-pipes," moving them faster toward more effective joint operations [30]

Opposing Views

Opponents to the combined development of Japanese - United States TMD systems generally voice several consistent concerns [31] First, they believe TMD will upset the region's strategic balance with the Chinese, who have publicly opposed deploying missile defenses in Japan and view United States - Japanese defense cooperation as a potential 'anti-Chinese' alliance [32] They fail to see this development and deployment as a long-term effort where we will have a chance to discuss in detail our objectives with the Chinese--that is simply the right to protect our forces Secondly, they state neither country can afford TMD systems due to the high cost of defending against a very unlikely "worst case scenario" threat In this case, they choose not to recognize the incremental acquisition plan designed to deploy capability, commensurate with the

observed, not postulated, threat Considering the threat today, we are already behind and need to field an improved missile defense system as soon as possible while preparing for more capable threats As a holdover from the technology sharing debacle surrounding the advanced FS-X fighter, critics assert we are giving the Japanese opportunity to exploit precious technologies With today's rapid technology diffusion cycles, exacerbated by the global information explosion, it is only a matter of time before Japan and the rest of the highly industrialized world would share in most missile defense technologies Ironically, the Japanese already now have a comparative advantage in some of these technologies We can resolve these concerns by carefully crafting our cooperative program agreements and by selling the advantages of TMD to meet our regional security goals to the public, Congress, and our regional allies and competitors

Policy Recommendations

To be successful, an inter-agency working group from Defense, State, Commerce, Arms Control and Disarmament Agency, U S Trade Representative, and the Intelligence Community must focus our efforts in several key areas First, this team must review the strategic issues surrounding our Japanese TMD program, both to assure the alliance will receive the best return on its investment and to galvanize United States government support for the program [33]

Next, the group must prepare policy guidelines and processes to craft and adjudicate specific cooperative development, technology sharing, and force operations agreements Ideally, the programmatic and technology sharing agreements would delineate major program development milestones and success criteria, along with required funding estimates and commitment dates Likewise, the operations agreement should describe a concept of operations

to allay regional actors concerns For example, this agreement could be patterned after our combined NORAD operations and command structure that performs a similar defense function

Using private diplomacy, we must engage the Japanese Ministers of Foreign Affairs, Finance, International Trade and Industry, along with the Defense Agency, to help form collective advocacy for cooperative TMD In this phase, we must be extremely sensitive to recognize their significant technological and financial contributions by shaping the *entire* relationship "as partners and not as customer-supplier "[34] Concurrent with the Japanese government approval process, both countries must sell the public on the vital nature of the security and economic advantages TMD programs bring to the alliance

In concert with the Japanese, we must engage China and North Korea in a diplomatic and military strategic dialogue, regarding our goals and intentions for this cooperative program We must help China understand that collective national security and regional stability are best served by cooperative, non-threatening defensive measures rather than relying upon traditional balance of power, threatening offensive capability Diplomatic opportunities abound in the coming months as President Clinton, Vice President Gore, and Secretary of State Albright embark on diplomatic visits with Chinese President Jiang's government Militarily, we must convince senior Chinese and North Korean leaders this defensive program is part of our larger strategy to reduce, deter, or, if necessary, defend against any threat Since TMD is a long-term effort, these continuing discussions could provide the springboard for a future coherent United States policy of cooperation with China and North Korea Hopefully, by beginning the dialogue on the details of our defensive capability, we could also persuade them to support proliferation controls on ballistic missiles and weapons of mass destruction

Conclusion

Our strong security alliance with Japan remains the bedrock of peace and stability in Asia We would be severely jeopardizing our enduring vital interests by failing to act cooperatively with the Japanese to develop and deploy an effective TMD Advances in offensive missile technology and increased proliferation of weapons of mass destruction, along with regional actors whose intent is uncertain, make TMD systems an imperative in Northeast Asia

The proposed cooperative program is consistent with both countries' stated foreign policy objectives that ties United States presence in Japan to strong bilateral security agreements In April 1996, in the Japanese Prime Minister-US Presidential Joint Declaration on Security reaffirmed the United States continued military presence to maintain peace and stability in the region and recognized "close bilateral defense cooperation as the 'central element' in the relationship "[35] In this relationship, TMD systems are essential to reduce regional instability, deter hegemonic states, and defend our critical assets We must pursue this important program -- we can ill afford to let this opportunity pass

> "It would be sad irony if neither the United States nor Japan were to acquire [TMDs], when the key to the success is each other "[36]
>
> James A Kelly, *The Almanac of Sea Power 1996*

NOTES

[1] Margaret Thatcher, foreword to *The Next War*, by Caspar Weinberger and Peter Schweizer (Washington Regnery Publishing, 1996), xi

[2] Clifford Kraus, "Japan Hesistant About U S Antimissile Project," *New York Times*, 15 Feb 97, sec 1, 3

[3] *A National Security Strategy of Engagement and Enlargement* (Washington U S Government Printing Office, 1996), 13

[4] Young-sun Song, "Prospect for U S -Japan Security Cooperation," *Asian Survey*, vol 35, no 12, Dec 95, 1090

[5] Kraus, sec 1, 3

[6] David B H Denoon, *Ballistic Missile Defense in the Post-Cold War Era* (Boulder Westview Press, 1995), 56

[7] Staff Professor Lecturer, Military Strategy and Operations Course, The National War College, Mar 97 Expressed mathematically, "Threat = Estimated Enemy Capability x Estimated Intent To Act x Estimated Friendly Vulnerability " For example, if any element is zero or very low, the threat is assessed as zero or very low

[8] *National Security Strategy*, i, 11-12

[9] James Kitfield, "A World of Woes," *National Journal*, 26 Oct 96, 2278

[10] Iriye Akira, "Understanding Japan-U S Relations, 1945-1995," *Japan Quarterly*, vol 42, no 3, Jul 95, 261

[11] Steven Komarow, "China Busy Bolstering Its Military Ships, Subs, Missiles Top Shopping List," *USA Today*, 25 Feb 97, 7-9

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[13] "Japan Says North Korea May Have Missiles Ready," *New York Times*, 14 Apr 97, 11

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[16] Senior Professor/Analyst Lecturer, Military Strategy and Operations Course, National War College, Apr 97

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[19] Barbara Opall, "Japan Nears Commitment to BMD Buy," *Defense News*, vol 12, no 16, 21-27 Apr 97, 82 These are rough estimates of the options Prior estimates quoted by Steven A Hildreth and Jason D Ellis, "Allied Support for Theater Missile Defense," *Orbis*, Winter 96, 110, had figures ranging from $4 5 - $16 3 billion

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Defense Planning for the 21st Century, Fletcher School of Law and Diplomacy, Cambridge MA, awaiting publication

[21] James A Kelly, "U S Task Is To Provide Vision Even While Requirements For National Security Are Under Continuous Question," *The Almanac of Seapower 1996*, vol 39, no 1, Jan 96, 37

[22] Andrew Mack and Pauline Kerr, "The Evolving Security Discourse in the Asia-Pacific," *The Washington Quarterly*, Winter 1995, vol 18, no 1, 133

[23] Department of Defense, Office of International Security Affairs, United States Security Strategy for the East-Asia-Pacific Region (Washington U S Government Printing Office, Feb 95), 21

[24] Institute for National Strategic Studies, National Defense University, *1997 Strategic Assessment Flashpoints and Force Structure*, Hans Binnendijk and Patrick Clawson, eds , (Washington U S Government Printing Office, 1997), 63

[25] Jeff Erlich, "Ballistic Threats Trigger Interest in Missile Defense," *Defense News*, vol 11, no 16, 22-28 Apr 96, 26

[26] John Pike, "Taking Aim at the ABM Treaty THAAD and US Security," *Arms Control Today*, May 95, 7

[27] Department of Defense, Ballistic Missile Defense Organization, "Missile Defense Investment (BMDO Fact Sheet 96-023)," Aug 96, available from http //www acq osd mil/bmdo/ bmdolink/pdf/96023 pdf, Internet, accessed 1 Mar 97, 2

[28] Institute for National Strategic Studies, *1997 Strategic Assessment*, 65-66

[29] Paul Kaminski, "Theater-Wide Program Open For International Cooperation," *Aerospace Daily*, 5 Mar 97, 1

[30] Confidential source, senior Department of Defense acquisition official, interview by author, 12 Mar 97, transcribed from notes, Washington

[31] This section is meant to *specifically* focus on the countering views of developing and deploying the proposed United States - Japanese TMD system There are numerous arguments against generic TMD systems that span from asymmetric threat responses to system effectiveness vice costs to treaty interpretation For these issues, see Spurgeon M Keeny Jr , "The Theater Missile Defense Threat to U S Security," *Arms Control Today*, Sep 94, 3-7 , John Pike, "Theater Missile Defense Programs Status and Prospects," *Arms Control Today*, Sep 94, 11-14 , and David Mosher and Raymond Hall, "The Clinton Plan for Theater Missile Defenses Costs and Alternatives," *Arms Control Today*, Sep 94, 15-20

[32] Bill Gertz, "U S Missile Defense," 1

[33] Paul S Giarra, "Theater Missile Defense Strategic and Political-Military Factors," Mar 97, 2 Unpublished rough draft discussed with Mr Giarra, Institute for National Strategic Studies, during an interview by author, 9 Apr 97, Washington Mr Giarra asserts the United States needs to review the broader geostrategic context of this Asian TMD "management initiative "

[34] Barbara Opall, "U S , Japanese Industrialists Promote Cooperation," *Defense News*, vol 12, no 16, 21-27 Apr 97, 74

[35] Ralph A Cossa, *Major Powers in Northeastern Asian Security*, (Washington National Defense University Press, Aug 96), 17

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